120880 – PS - 01 Rev. 1

## **SPECIFICATION**

for

# STORAGE TRAILER BUILDING 456

at

NCI-FREDERICK FREDERICK, MD 21702-1201

> WORK ORDER #120880 September 17, 2004



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1	10/12/04		W	A Guarre	M	RMWien
Revision	Date	Revision Description	By	Reviewed	Customer	Approved

### PART 1 - GENERAL

## 1.1 SCOPE OF WORK

A. The work includes the requirements for one 12'x24' (288 gross square foot) trailer to be used for file and records storage by the Biopharmaceutical Development Program at NCI-Frederick. Manufacture, deliver and install trailer as specified herein. Trailer shall be set in place on appropriate foundations, entrance stairs, landing, and landing roof installed, and finished inside and out for a turn-key project. Provide concrete pad footings for all required support points on the trailer and entrance stairs and landing. The trailer shall consist of a single open space for storage and one entrance/exit.

All utilities to the trailer will be provided and installed by SAIC.

- B. All work shall conform to the requirements of all applicable codes, ordinances and standards of the federal, state and authorities having jurisdiction. In case of conflict between drawings or specifications and the requirements of the local jurisdiction, the more stringent requirements shall apply. All construction shall comply with the latest editions of the IBC, NFPA, NEC, ANSI and ASTM codes.
- C. The trailer shall be located on an open area adjacent to Building 458 as shown on the attached site plan sketch.

#### 1.2 JOB SITE CONDITIONS

A job site visit to NCI-Frederick shall be made to determine the extent of installation difficulties that may exist, and to verify existing utility locations. Utility locations on plans are approximate.

## 1.3 WARRANTY

All work shall be guaranteed against defects, leaks and lack of proper system performance or non-operation for a period of one year after date of acceptance.

#### 1.4 SUBMITTALS

#### A. Drawings:

 Site plan showing trailer location, relationship to adjacent structures, paving, trees, etc.

- Architectural floor plan with dimensions.
- Electrical plan showing light fixtures, receptacles, emergency lighting unit, and panelboard location.
- B. Technical cut-sheets for HVAC unit.

## PART 2 - MATERIALS/PRODUCTS

#### 2.1 TRAILER

- Size: One section unit, nominal size; 12' wide by 24' long.
- B. Exterior walls: 2 X 4 studs @ 16" O.C., covered with 3/8" plywood and .019 aluminum siding, color to be chosen from manufacturer's standard selection. Install 6 mil vapor barrier w/stone ballast under trailer and skirt perimeter. Provide adequate ventilation in crawl space per code.

#### C. Insulation

- Walls; R-11 Kraft faced fiberglass with polyethylene vapor barrier.
- Roof; R-19 Kraft faced fiberglass.
- 3. Floor; R-11 Kraft faced fiberglass.

## D. Interior Finishes

- Walls: ½" thick vinyl covered gypsum with matching batten strips.
- Ceiling: 24" x 48" fissured mineral board panels on white "T" type suspension system, 8'-0" A.F.F.
- Floors: Sub floor shall be 11/16" T&G OSB. Finished floor shall be 12"x12" vinyl composition floor tile with 4" vinyl cove base.
- All corner, ceiling cove and window molding shall be prefinished wood. Door trim shall be #2 pine standard door molding for interior wood doors.

E. Roof: Tapered truss on 16" centers with ½ "CDX sheathing and a fully adhered single ply membrane (EPDM) roof. Provide and install 5" aluminum ogee gutter, 0.032" with enameled finish and 3"x4" downspouts, 0.024" with enameled finish.

### F. Doors

- Exterior: Commercial grade insulated 18 gauge steel 3'-0" x 7'-0" with standard cylindrical lockset, pneumatic closer, weather-stripping and threshold.
- G. Windows: Sliding type, aluminum or vinyl frame, insulated double pane glass, insect screen and 1" white mini blinds. Window frame color shall match exterior trim.
- H. Provide floor joists and foundation piers to accommodate a 200 lbs/sq. ft. floor live load throughout the trailer.
- I. Skirting: Provide and install skirting around perimeter of trailer to match exterior siding. Install pressure treated framing with vertical studs on 24" centers. Skirting shall follow grade as close as possible. Excavate topsoil around perimeter of trailer; install crushed stone 3" deep by 24" wide. Make sure stone covers bottom edge of skirting. Provide a door in the skirting for access to the crawl space.

## 2.2 EXTERIOR AND SITE WORK

## A. Stairs and Landings

- Construct stairs and porch landing at trailer building entrance. Cover stairs and landing with an aluminum awing with gutter and downspout or approved framed structure.
- Provide non-slip traction strips on all stair surfaces.
- All exterior wood construction shall be CCA pressure treated southern pine.
   Decking shall be 5/4 by 6" deck boards. Use galvanized nails and lag bolts.
   Install concrete footings under all structural supports

## B. Excavation

1. Excavation for the installation of utilities and footings shall be unclassified.

- All material removed from the excavation and not re-used as fill shall be removed from Ft. Detrick and disposed of by and at the expense of the Contractor.
- The Contractor shall temporarily support the sides and ends of excavations, where necessary with shoring or bracing as approved by OSHA. The Contractor shall be entirely responsible for the design and adequacy of the approved support system.
- 4. The Contractor shall protect from direct or indirect damage all pipes, poles, utilities, walls, buildings, and other structures or property in the vicinity of this work, whether above or below the ground. Should any damage occur the Contractor shall be responsible for repairing or replacing damaged materials to the satisfaction of SAIC at no additional expense to the contract.

## C. Grading

Level any disturbed lawn areas. Backfill and grade as required. Rake and seed with fescue blend grass seed.

## 2.3 FIRE PROTECTION

A. Portable fire extinguisher(s) shall be provided and installed by SAIC.

#### 2.4 HEATING AND AIR CONDITIONING

- A. Provide a self contained system sized for the interior heating, cooling, and dehumidification load. Units shall be sized for outside ambient temperatures ranging from -10°F to 100°F. Unit must comply with ASHRAE 62-1999; provide 20 cfm outside air per occupant. The unit shall be suitable to operate on electrical service available at the site. Electric baseboard heating is NOT permitted. See paragraph 2.5 for available electrical service.
- B. Diffusers (Supply air): 24" x 24" lay-in type, 4-way throw pattern, J&J Register Products, Model 1234 or approved equal. Diffusers shall be located as close as possible to the center of rooms.
- Return air shall be via a sealed wall plenum at HVAC unit.
- Provide thermostat located in common area.

#### 2.5 ELECTRICAL

- Service: 120/240V, single phase, 3-wire, 60 Hz, 60-amp electrical service provided by SAIC.
- B. Load Centers: Provide one 100-amp, 120/240V, single phase, 3W load center with 100 amp main lugs and number of 1 pole and 2 pole branch circuit breakers as required.
- C. Interior Lights: Provide 2'x4' recessed grid troffer fluorescent lighting fixtures with electronic ballasts (<10% THD), type T-8 fluorescent lamps and prismatic acrylic diffuser. Quantity as required to provide uniformly distributed illumination of minimum 2.5 watts/sq. ft. throughout on work plane at 30" A.F.F.
- D. Receptacles: 125V, 20 amp, NEMA 5-20R duplex outlets. Use GFI type where required by code.
- E. Switches: 120V, 20 amp, toggle type, 1 pole.
- F. Exterior Lights and Receptacles: Provide a weatherproof, 50 watt, metal halide, wall pack w/integral photocell control at outside entrance. Stonco Model #TWL-50W-HMA-L-PC-120V or equal. Provide a GFI protected convenience receptacle within ten feet of each piece of exterior HVAC equipment.
- G. Emergency Lights: Provide rechargeable battery unit, with dual head.

## PART 3 - EXECUTION

#### 3.1 DELIVERY

Trailers shall be delivered to Ft. Detrick and set on site as per this specification and attached drawing.

## 3.3 START UP OF SYSTEMS

Following the connection of utilities to the trailer by SAIC personnel, the contractor shall perform start up of the mechanical and electrical systems in the trailer. Correct functioning of these systems must be demonstrated prior to final acceptance by SAIC.

## 3.2 POINT OF CONTACT

Manufacturer shall provide point of contact with phone number for on site emergency service.

End of Section